

INTERNATIONAL LABOUR ORGANIZATION

SEED Programme. Geneva

BOTH SIDES OF THE BRIDGE:

PUBLIC-PRIVATE PARTNERSHIP FOR SUSTAINABLE EMPLOYMENT CREATION IN WASTE MANAGEMENT, DAR ES SALAAM



**Paper submitted for the Workshop
“Planning for Sustainable and Integrated Solid Waste Management”**

Manila, The Philippines, 18 - 21 September 2000

By Saskia Bakker, Jasper Kirango and Kees van der Ree

Table of Content

I.	Employment promotion in developing countries	1
II.	Solid waste in Dar es Salaam	2
	i) context	
	ii) waste management	
	iii) previous initiatives	
III.	The new privatization model	5
	i) planning phase	
	ii) key elements	
IV.	Results of the new privatization approach	8
	i) new jobs	
	ii) new business opportunities	
	iii) financial sustainability	
V.	Public and private roles for making waste management work	12
	i) the City Authorities: more active and more busy	
	ii) the contractors: challenge of sustainability	
	iii) the value and threat of politics	
	iv) change agents: making the market work for all	
	List of main references	15

Abstract:

In Dar es Salaam, Tanzania, recent privatization efforts have helped creating more than 1,500 jobs. Solid waste collection and street sweeping has been contracted out, since early 1999, to small-scale enterprises and community-based organizations. Coverage of waste collection increased from a mere 5 to more than 40%. And these services now also reach the poor. The key recipe to A better services and more jobs@ is a comprehensive planning process involving relevant local actors. It is anchored in the recognition that self-help and community-based initiatives can contribute to public service delivery in a sustainable manner. The paper tries to show that the inclusion of the local employment perspective in urban planning may motivate the Dar es Salaam and other municipal authorities to privatize other public services as well.

I. Employment promotion in developing countries

Poverty and social exclusion are a direct result of unemployment. In many developing countries, the need for job creation is almost unsurmountable. Although many Governments make the struggle against high unemployment and poverty a central objective of their programmes, few succeed in helping job seekers secure a workplace. As a result, many people take up self employment. In most cities of Latin America and Africa, 9 out of every ten jobs to be created over the next decade will be in the informal and small-scale enterprise sector. Still, the problem remains how to make these jobs sustainable, and generate yet more employment through enterprise growth.

Indeed, the issue is most acute in urban centres, where unemployment and a lack of basic infrastructure are exacerbating already poor living conditions. Some local Governments, now mandated by decentralization programmes, are responding to these problems with their own policies. Broadly, they can try to tap three main sources for employment creation: a) investment in physical infrastructure, b) large-scale, formal sector enterprises, and c) micro- and small enterprises, many of them in the informal sector.

One of the most important contribution local Governments can make is to create the right conditions to help the private sector to invest and generate jobs. But they can also influence employment creation more directly where public funds and common services are concerned. Investment in creating or up-grading basic infrastructure - such as roads, drains, water and sanitation provisions - can be done in ways whereby labour is utilized to the maximum extent. Hand tools and simple, locally available equipment replace tractors and other imported machines, thereby making the works more labour intensive.

The provision of common services is a second major opportunity for local Governments to create employment directly. Services such as waste collection, water distribution, street- and market maintenance can be delivered effectively by small-scale, voluntary initiatives. Such Anew-style privatization@ is also likely to improve and to expand coverage of previously un-serviced segments of the population, especially in fast growing cities.

This paper tries to give a realistic account of what happened with the Dar es Salaam solid waste management strategy from 1997 to mid-2000. It is mainly based on the operations of the ILO-Dar es Salaam City Commission project *Support to the delivery of environmental services by the small-scale private sector*®, a component of the wider UNCHS programme to enhance environmental sustainable city development in Dar es Salaam.

The project is supported by the ILO=s InFocus Programme SEED under an interregional Public-Private Partnership (PPP) Programme that intends to strengthen local Governments= capacity to enhance their understanding and promote a facilitating role for micro and small enterprise (MSE) development, in particular in the area of public services. The PPP also targets intermediary organisations (such as community-based groups and local trade organizations) to promote their capacity to support local initiatives, and provide direct support to starting and existing MSEs.

II. Solid waste in Dar es Salaam

i) Context

Dar es Salaam is the largest city of Tanzania. The city is spread out over a large area and includes communities in a typical rural setting. However, more than half of its approximately 2,5 million residents (JICA data, 1997) live in densely populated unplanned areas. The city is divided into three districts or municipalities: Temeke, Ilala and Kinondoni. The administration of the city was headed by an elected body, the Dar es Salaam City Council or DCC. Since 1996, the functioning of the City Council has been suspended and temporarily replaced by the City Commission, which is appointed by the central government of Tanzania.

The city lies on the shores of the Indian Ocean. Large parts of its area consists of former swamps and serious flooding during the rainy season is a common phenomenon. In the past years, a lot of work has been done to improve the condition of the main roads. Nevertheless, most residential areas only have dirt roads, which become difficult to pass after heavy rain. In the unplanned settlements, houses are built so closely together, that the paths between them are sometimes too narrow for even a wheelbarrow to pass. Basic infrastructure such as roads, piped water supply, drainage, waste collection and sewerage are lacking.

The population of Dar es Salaam is growing fast at a rate of 8-10% per year. Like in many other urban areas in developing countries, the city's inhabitants are relatively young and unemployment is rampant. Industrial employment is decreasing and the Government has retrenched large numbers of employees. As a result, most new job seekers revert to informal economic activities, which are increasingly urban-based.

ii) Waste management

It is estimated that Dar es Salaam currently generates about 2000 tonnes of waste per day. Before 1992, less than 3% of the daily generated waste was collected. Common ways of waste disposal were to bury or burn the waste, or to dump it in open spaces. Obviously, these methods created pollution and were a source of tension, especially in densely populated areas. Even the collected waste could not be disposed of properly. For a long time, Dar es Salaam did not have an official dump site. The waste was used to fill in low lying or subsiding areas. The city opened and closed various dump sites. One was located too close to a residential area, another polluted the sea. The dump site which has been used most frequently, becomes inaccessible after heavy rains and the waste leachate disappears in a creek.

The annoyance over the waste situation caused serious political tension. The inability of the (elected) City Council to manage solid waste effectively contributed significantly to their decision by the President to dissolve it, in 1996, and have it replaced by an appointed City Commission. When the new city authorities realized their difficulty to cope with the growing burden of waste collection and disposal, they decided to involve the private sector. After experiments with privatised waste collection in limited areas of the city, the Commission privatised waste collection in all areas in 1998. As a result, over 60 private enterprises and Community Based Organizations started waste collection, each in their designated area. For most of the contractors, waste collection was a new activity. The City Authorities also got new tasks: their role changed from implementing to supporting and monitoring agency. Their efforts

illustrate how privatization of a public service can lead to the creation of a large number of sustainable jobs, as well as a cleaner urban environment.

iii) Previous initiatives

In the past decades, Dar es Salaam received a number of foreign donations for waste management. The Government of Japan and Italy donated 39 trucks for refuse collection service between 1987-1991. The refuse collection rate increased significantly due to these donations. However, the improvement did not last long as only 5 vehicles out of 39 vehicles were operational by July 1992. The City Authorities collected insufficient revenues to pay adequate amounts of fuel and oil, let alone the costs of maintenance and replacement. The City Council decided it needed the help of the private sector to improve the waste situation. Privatisation also fitted well in the overall government policy, which sought to reduce the State's involvement in the provision of services.

The City Authorities undertook a major Emergency Clean-up Campaign in 1992 and adopted a Strategy of Action. The Strategy consisted of four components:

1. privatization of waste collection in the city centre,
2. expanding the collection system through community participation and additional public-private partnerships,
3. better management of more disposal sites and
4. encouragement of waste recycling.

The privatisation of solid waste collection started as a pilot project in 10 wards in the city centre. One private company was awarded a contract to provide waste collection services. After an initial spectacular rise in waste collection, the success soon dwindled. By 1994, another four companies received contracts for waste collection in various parts of the city centre. However, this did not result in a significant rise in the amount of collected waste.

There are a number of factors which contributed to the failure of the first phases of involving private sector. On the part of contractors these were:

- X Poor customer orientation and heavy reliance on the city to force people to pay for the service provided to the residents,
- X Inadequate equipment base and lack of operational experience in business management,
- X Internal conflicts within company management.

The main factor on the side of the Dar es Salaam City Commission included:

- X Inadequate planning and absence of public education and awareness creation
- X Inconsistency in contractual arrangements and no support to the private contractors
- X Weak institutional and regulatory capacity, esp. enforcing by-laws.

As a result, the need for waste collection became so acute in some communities, that voluntary groups started their own waste collection service. An example is the case of Hana Nassif, an unplanned settlement with a serious flooding problem. Drains, constructed with (paid) community labour, brought relief. Soon however, these drains became clogged with waste. This prompted a women=s group to start a waste collection service, the first of its kind in Dar es

Salaam. Over time, Community Based Organizations in other parts of the city followed their example. Though initially their working area was limited to small numbers of households, it illustrated the desire and the willingness of people to improve the hygiene of their living environment.

The need to improve the waste situation was underlined by various other local initiatives. In the period 1995-1997 the UNCHS (Habitat) Sustainable Dar es Salaam Programme organized working groups in which representatives of various institutions and community groups discussed how to create a sustainable living environment in Dar es Salaam. Waste management featured high on their list of priorities

When the newly appointed City Commission started functioning in 1997, they found that only 4 out of the 30 waste trucks were in working condition. At that time, around 1400 tons per day of waste were generated and only 60 tons per day, or 4% of the total, were deposited at the dump site. Obviously, political pressure was high to take effective measures for a cleaner Dar es Salaam.

III. The new privatization model

i) Planning phase

The Dar es Salaam City Commission decided to initiate a new, integrated strategy for improvement of the waste management services. A principle element of the strategy was a greater involvement of the private sector in waste collection, transport and recycling. The strategy aimed at establishing a public/private partnership through the support to community based and individual waste handling and the complementary provision of public transport and dumping facilities.

Four task forces comprising of commissioners, heads of departments and the waste management department staffs were formed to formulate guidelines on the implementation of various aspects of integrated solid waste management. These task forces were on zoning, tariff setting, awareness campaigns and health education, dumpsite improvement and recycling initiatives. The task forces were headed by commissioners or municipal directors.

ii) Key elements

1. User charges

The DCC decided to impose a direct charge to each resident. The key reasons to adopt direct user charges were as follows:

- The DCC had limited financial capability to pay for the service, while at the same time, meet financial demand of other equally important services like education, health roads etc.
- Direct user charges were expected to increase citizen responsibility towards waste management services.
- The experience gained from the past privatised service showed, that the residents were willing to pay provided that they received good service sufficient public education.
- Direct user charge was also considered appropriate for sustainability of the privatised solid waste management service.

The ability and the willingness of the people to pay and the cost of the services were some of the factors used to determine the rates to be charged. The DCC, using the rates set in the 1984 bye-law on privatisation and the experience of the private sector provision of the service between 1994-1996, decided to set the rates in three categories. The categories are rates for people living in low income areas(unplanned squatter areas), those living in medium income areas (semi unplanned) and those living in high income areas (fully planned)¹.

2. Including all possible local contractors

¹ The rates are TShs.500/=(US\$0.65), TShs.1,000/=(US\$1.25) and TShs.2000/=(US\$2.5) per household per month for low income, medium income and high income respectively.

Several companies from abroad approached the city authority with the intention of providing exclusive waste management service to the entire city using heavy machinery. The city authorities rejected these offers, because they could not afford the costs involved and considered it too risky to grant one company a monopoly. The idea was also rejected because it meant that most of the residents employed in this sector would be rendered jobless. On the other hand, the city authorities decided to consider the involvement of other participants, such as small and micro enterprises, CBO=s and NGO=s. Many of these were based in unplanned areas where the large enterprises were not willing to provide services, due to the lack of necessary infrastructure. Small enterprises, CBO=s and NGO=s were considered more suitable to serve these areas, amongst others because of their close relation with the community.

3. Competitive bidding

Companies, CBOs, NGOs and individuals interested in the provision of solid waste management in the city were requested to submit their proposals on solid waste management. The applicants were required to provide information on their capacities in-terms of equipment (vehicles), financial capability, appropriate professions (Engineer, health Officers, Accountants etc.), experience in refuse collection and other requirements of a business company such as offices, bank accounts, addresses etc. The information was verified by visiting each applicant physically.

Initially, only fifteen applicants were considered qualified to provide waste management services. However, due to the DCC=s policy of encouraging involvement of CBO=s and NGO=s in waste management and the active lobby of these groups, they were also allocated working areas. A total of 70 contractors were given licences. About 15 medium size companies were assigned duties in the city centre and in planned areas, whereas the remaining wards, including unplanned areas, were assigned to community based organizations (CBO=s), Non governmental organizations (NGO=s) and small and micro-enterprises active in those areas.

4. Institutional reform

In March, 1998, the Dar es Salaam City Commission established an independent waste management department (WMD). The WMD was born out of the formal Dar es Salaam Sewerage & Sanitation Department (DSSD) and the units of the Health Department dealing with wastes. In anticipation of the forthcoming decentralization of the city, the department was structured on the basis of the three independent municipal councils (Ilala, Kinondoni and Temeke), with a central co-ordinating division at City Level (Apex). The department=s responsibilities are to support the planning and delivery of waste management services, development of clear policies and guidelines for the provision of services by the contractors. Other responsibilities include: monitoring of the service, enforcement and compliance to health regulations, deployment and development of competent personnel, and improvement of solid waste management rules and regulations.

5. Promoting recycling initiatives

Waste recycling was also incorporated in the waste management strategy. The objective of promoting recycling was to reduce the waste generation and the need for dumping space and to create employment for city residents. The planned activities included the mobilization and support of small-scale recyclers and waste pickers (scavengers), awareness creation to industries to encourage waste recycling and product innovation, and market development for recycled products. Part of the latter was the promotion of the market linkage between industries and small-scale waste collectors, and exploring means to subsidize costs of transporting recyclables. Composting to support urban agriculture was considered, though it would be new to most citizens.

6. An external change agent

The initiative for change came from within the city government. But the process to realize the far-fetching and sensitive reforms needed to be supported by an external agent. The DCC and UNDP/UNCHS invited the ILO to help shaping a support programme. It was designed to be an integral part of the waste management department and would partly be implemented by its staff members. ILO would provide expertise for support to the private sector, to help developing an internal management structures and train DCC staff. Overall, the programme focused on the following areas:

- The creation of a facilitating set of rules and regulations for the effective participation of the private sector.
- Capacity building among public and private actors to take up their respective roles in an effective solid waste management strategy.
- Promotion of a community based waste collection and transport system.
- Support to small business development in clean and safe waste treatment and recycling activities (creating markets and equipping actors with skills, technology and credit).
- Establishment and management of refuse collection systems and dumping sites

UNDP provided the City Commission with the means to set up a waste management department, to build some small waste transfer stations and to buy a truck and some small equipment. ILO (funded by UNDP) assisted with technical advice and strategic planning as well as capacity building of the main actors involved.

For the City Commission, the capacity building mainly consisted of study tours for municipal officers and the participation in an international ILO workshop. The contractors received the following training:

1. introductory course in solid waste management
2. business start-up and management
3. community mobilization techniques
4. group management (for CBO=s and NGO=s)
5. recycling of metal, plastic and organic waste
6. occupational safety and health.

In addition, the ILO assisted and encouraged the establishment of an umbrella association of waste contractors and organized sensitization campaigns for local leaders.

IV. Results of the new privatization approach

The contractors started operation in February 1999. Over the next two months, the waste collection increased from 18600 to 33479 tons, representing 55% of the daily waste generation. This reflects partly reflects the backlog of uncollected waste, but it also shows the enthusiasm with which the contractors took up the job. In June, the coverage stabilized at about 40%.

i) New jobs

At the time of starting operations in 1999, the contractors employed a large number of people, over 1900 in total. To some extent, this number was needed to clear the waste that had accumulated in all areas. Many contractors however, employed too many people due to their lack of experience. They were also under pressure of local leaders, who forced contractors to employ people of their preference, in return for their support in the community. Not only contributed this to the over-employment, but many of these workers proved to be unreliable.

Within two or three months, the contractors realized they could not collect enough fees to pay the wages of all their workers. They reduced their workforce to a total of about 1250 employees. This number included people who previously had been (partially) employed in other activities of the contractors. Some of the employment replaced the workers who had been retrenched earlier by the City Commission, in particular street sweepers. It is estimated that the net increase in employment is about 900-1000 people. An ILO survey in August 2000 revealed that currently 1,522 people are employed in solid waste collection in Dar, of which 55% are women.

WOMEN IN WASTE

Even before waste management was privatised, women were initiators of community based solid waste collection services. In many cases, women were prompted to engage in these activities because of the increasingly intolerable living conditions in some areas. Women's groups created their own work by starting waste collection services, for which they charged money.

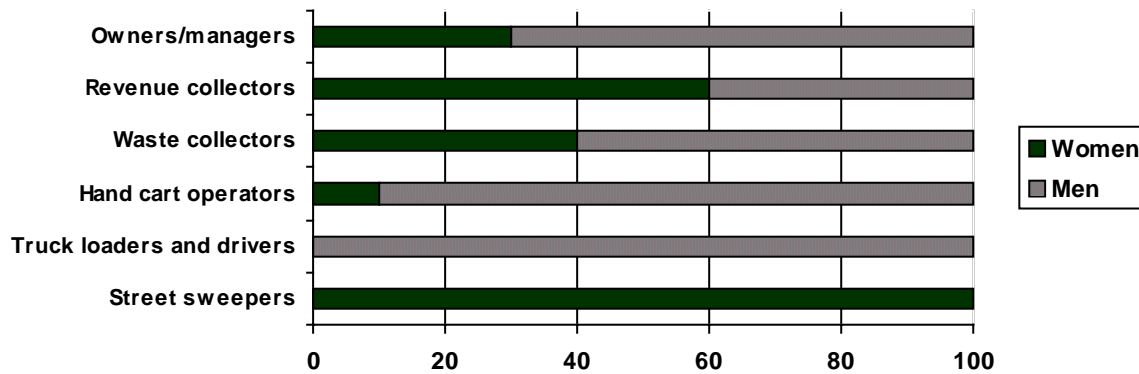
A spokeswoman for a community based women's group in Kisumu, the 'Kisumu Women Development Trust Fund' or KIWODET, explains their involvement as follows: "We started as a group in 1995 with 5 members as a tailoring and embroidery group. Lack of a market for our products made us start informal catering services, also known as *Mama Ntilies*. This activity also did not bring us sufficient income. We became involved in solid waste collection and disposal as a result of not getting enough income from our other activities. The other reason is that we realized that the *mikokoteni*-boys who were doing this job, were earning a living with this work. Moreover, solid waste was becoming a problem and many families were using children to dispose of their waste at cheap rates. One child was knocked down by a speeding car while doing this job."

KIWODET started waste collection in June 1998 with 20 members, all women. Two years later, they were progressing well and had initiated more diversified activities in solid waste management. They had, as one of the first CBO's in the city, started composting activities after attending a course initiated by ILO in July 1999. They obtained extra income through recycling, by sorting out recyclable goods and selling them to industries.

Women and previously unemployed youth have particularly benefitted from the newly created job opportunities. Women constitute just more than half of the total workforce of the waste contractors. They are however, under represented in the category of owners and managers of the enterprises and CBO=s, except in some CBO=s which are managed by women only. Almost all street sweepers are women, while the collection of waste from households and

enterprises is done by men as well as women. Most contractors consider handling hand carts too heavy for women and they also do not employ any women as truck crew. On the other hand, women are preferred for the job of revenue collectors; they are believed to be more honest and to approach the clients more efficiently.

Figure 1. Involvement of men and women in waste management, Dar es Salaam, 1999 (in percentages)



Source: ILO project estimates

Youth (especially male youth) are contracted for the physically heavy jobs, such as pushing handcarts and loading trucks. They also constitute a considerable part of the waste collectors. Like women, they are under represented in the decision making positions. None of the employees are younger than 18.

Not all jobs are full time. Many workers are paid only for the days on which they actually work, which varies between 2 and 7 days per week. The more established contractors pay weekly or monthly salaries, as well as secondary benefits such as housing allowance. All workers are paid at least the minimum wage of \$1.50 per day. Members of community based organizations contribute unpaid voluntary labour, especially for tasks such as community mobilization and maintaining contacts with the City Authorities. The same members are usually paid when working as revenue collectors or waste collectors.

Working conditions tend to be unsafe for those who are directly handling the waste: the street sweepers, the collectors and the truck loaders. Besides the dangers of cuts and infections from the waste itself, they are exposed to dust and fumes, speeding traffic and violence, in particular at the dump sites. The ILO project has consistently tried to improve the occupational safety and health of the workers, by offering training, continuous awareness creation and by providing some protective gear to the contractors.

ii) New business opportunities

THE BUSINESS OF WASTE COLLECTION

At seven in the morning the waste collectors of K.J. Enterprise report at the tiny office of their company. They receive their handcart, forks and spades and set off in different directions. Each of the 4 teams of 2 men will collect the waste of about 70 houses. The collectors knock the gate to receive the waste, or find it already placed along the path, in an old barrel, plastic bags or simply a loose pile. Most houses in their working area are big and the waste of 4 to 5 of these large households fills the handcart. The collectors push the cart to the main road and empty it at one of the temporary mini-dumps. In the course of the morning the company truck will pass to load the waste and transport it to the city dump. The truck crew also collects waste from businesses and institutes. Meanwhile, the two fee collectors set out on foot to collect the waste collection charges, from households, shops, workshops and other clients such as restaurants and small hotels. Most clients pay once a month, 1000 Tanzanian shillings (about US\$ 1.25) per household and a differentiated rate -according to size and type- for commercial establishments. Some of the street vendors pay daily: they cannot afford to pay a >high= amount at once and the fee collectors do not want to risk that they have disappeared before they have paid.

The director of K.S. Enterprise is satisfied with the progress of his waste business. It is still difficult to ensure that enough clients pay, that he maintains a good relation with the local authorities and that he keeps his workers and equipment in good condition. But it is clear that people appreciate the service. Moreover, it provides him and his team with an income.

Clearly, the privatisation of waste management has created a new business opportunity. Apart from the few enterprises which were involved in the first phase of privatisation, all enterprise-contractors had been operating a business prior to waste collection. Transport and construction companies already had relevant equipment and knowledge, but for enterprises based on for example a pharmacy, the waste business was an entirely new product line. The same applies to most community based organizations. They had been set up primarily for the benefit of the community. Some had been involved in environmental activities such as tree planting and gardening. A few had started with waste collection in the previous years and already built up some experience. But the larger part knew little if anything about waste management. In this light it is remarkable that out of the initial 62 contractors who started operation in the beginning of 1999, 55 were still providing services by the end of that year. This can be contributed to the commitment of the City Authorities to make the privatization a success, to the contractors themselves and to the supporting organizations, But the contractors also pointed out other important factors, such as their other income generating activities. Their original business and the street sweeping contracts issued by the City Commission, provided a basic income to pull the contractors through the difficult start up period. Some contractors also started to generate extra income through the sale of waste paper, plastic and tin cans for recycling.

iii) Financial sustainability

For the collection of refuse charges, each area of Dar es Salaam was designated by the City Commission as a high, middle or low income area. The City Commission also determined the rates for the refuse charges, after consulting the contractors on the expected operational costs and the willingness and ability of the public to pay these fees. Private households in high income areas are required to pay Tsh. 2000/- per month (approximately US\$ 2.50), in middle income areas the rate per household is TSh. 1000/- (US\$ 1.25) per month and in the low income areas it is TSh. 500/- per month (US\$ 0.65). Commercial establishments pay a fee according to the nature and the size of the business, approximately ranging between US\$ 6 and US\$ 125 per month. The contractors, however, are allowed to negotiate the height of the fee with their

customers.

The contractors collect the fees directly from the households and commercial establishment. They are free to decide on their fee collection system. Monthly collection is the most common system, although daily payment or payment per waste collection are also used. The financial relations between the contractors and the City Commission are limited. The contractors do not have to pay for their permit. After a grace period to start up the services, they would have to pay the City Commission dumping fees of about US\$ 1.20 per tonne of waste. The City Commission also announced it would rent out its vehicles to the contractors. In practice however, they provide secondary transport of waste to the dumpsite, to some of the community based organizations, without charging them for this service. In this way the City Commission effectively subsidizes the waste collection.

In the planning phase, it was assumed that a system would be possible of cross-subsidization between high and low income areas. The idea was, that revenue collected from high-income areas and business enterprises would compensate losses made in low-income areas. This was to be achieved by making one contractor responsible for high-income as well as low-income areas. Another possibility would have been a system where revenues from high-income areas were transferred to low-income areas. However, this system could not be realized. Except for a few private companies, none of the contractors had the capacity to serve more than one area. In practice therefore, there are contractors who only work in low income areas and whose earnings are barely enough for cost recovery. With the income earned from these low income households, the costs for primary waste transport can be covered, but it is difficult to pay also for secondary transport of the waste to the dump site. The assistance of the city trucks is very important for these contractors.

To a certain extent, unintended cross-subsidization is taking place. However, not among contractors or areas, but between clients. The fact that contractors are allowed to negotiate collection fees among clients under the set ceiling fee, has led to a balancing of better paying clients and poorer ones within an area. Also, some contractors apply flexible payment schedules, so that clients can spread payments through smaller amounts. Others collect fees when picking up the waste, rather than making special campaigns. This more entrepreneurial behavior has been reinforced by management training courses. The more explicit involvement of Ward leaders and Ward Environmental Committees has further contributed to increased adherence to fee payment, although lack of income remains the most important complaint of the contractors.

To finance their start-up costs, most contractors sought and found, to some extent, outside assistance. This came mostly in the form of some hand carts, wheel barrows, hand tools and protective gear, but no substantive amounts of money were involved. The majority of the start up costs were covered through the contractors' own resources, including borrowed equipment and voluntary labour.

V. Public and private roles for making waste management work

The case of Dar es Salaam shows, that privatization of waste management can create a relatively large amount of sustainable jobs without major outside financial resources. It does however require the combined and continued effort of the various partners involved. In the past, the City Authorities had not managed to keep the city clean on their own and that was the reason to involve the private sector. But neither can the private sector manage the city=s waste without the active support of the City Authorities. It is only with active support on both sides of the bridge, that waste management can be made to work.

Figure 2. Main partners and their roles in privatized waste collection Dar es Salaam

Partner	Roles
City Authorities	<ul style="list-style-type: none"> Selecting contractors Supervision of the service provided Provide back-up services Provide health education and awareness creation. Work with health department to enforce relevant by-laws. Operation and maintenance of dumpsites Cleansing of main streets and roads Building contractor=s capacities including training. Secondary transport for selected (low income) areas
Leaders at community level	<ul style="list-style-type: none"> Monitoring performance Awareness creation enforcement of cleansing bye-laws and regulations
Contractors	<ul style="list-style-type: none"> Provide solid waste collection and disposal Street cleansing in the zones and removal of dead animals Cleaning open drains Collecting refuse collection fees Keep up-to-date customer inventory Member of ward environmental committees Attend monthly debriefing meetings
Clients (residents, institutions and enterprises)	<ul style="list-style-type: none"> Depositing waste in bins, bags, etc. Fee payment
External agents	<ul style="list-style-type: none"> Training City Authorities and contractors Material support for equipment and start up capital Networks to share experience

ii) The City Authorities: more active, and more busy than before

Privatization has changed the role of the City Commission from implementing agency to monitoring and supervising agency. But although the City Commission was no longer the (main) executing agency of waste management, after privatization the amount of waste brought to the dump site by city trucks *increased*. This apparent contradiction can be explained by the fact that a larger area of the city was covered by waste collection and that the City Commission supported

some of the contractors with the transport of waste from the community to the dump site.

Especially at the start of privatization of waste management, the City Authorities had an important role in awareness creation. The contractors needed the support of the Authorities to convince people that they had to pay for a service which they expected to receive >for free=. In Dar es Salaam, the success of contractors was closely linked to their relation with the local leaders. When these were willing to talk to their community members about the need for and the benefits of a privatized waste management system, contractors usually received sufficient co-operation. In cases of continuous non-co-operation, the contractors needed the back up of laws and bye laws. The City Authorities had the task to ensure that the local legislation was in line with the privatization development and that the laws were enforced. This proved to be a considerable burden to the already overburdened Legal Department of Dar es Salaam City.

The role of the City authorities was also prominent in the management of the dump site. Privatization led to an increase of the amount of waste that needed to be disposed of. The Dar es Salaam City Commission had realized this from the beginning, but despite its efforts, a good dump site could not be established in time. Problems with the existing dump site had immediate effects on other parts of the integrated waste management system. For example, when the dump site caught fire in January 2000, contractors could not dispose of the waste for weeks. Some stopped the collection, while others illegally disposed of their waste.

The experience in Dar es Salaam shows, first, that successful privatization increases the workload for local authorities, and second, that new and higher competencies are required.

ii) The contractors: challenge of sustainability

A main concern for the contractors is the economic sustainability of the waste collection services. Their source of income consists of the collection fees paid by their clients. They therefore invest a lot of time and effort in the fee collection system. In some cases one fee collector is assigned to every three or four waste collectors, making the fee collection an expensive part of the system. Though the level of the fees is set in Dar es Salaam, some space for negotiations exists. However, most don't really know what the actual costs of waste management are. The main issue in the negotiations is usually how much the client is willing and able to pay.

Other activities carried out by the contractor, such as recycling, street sweeping and hiring out vehicles, can be useful contributions to the sustainability of the system. In a number of cases, they are indispensable to provide for a profitable undertaking. These complementary activities provide the contractor with a more stable income while the income of waste collection fluctuates due to seasons and other factors. They also make the use of equipment more efficient especially of vehicles and office or storage space.

At the organizational level, sustainability depends on personal management skills. Waste collection is a job opportunity, but it is often a dirty job. It therefore attracts people with few other alternatives. The contractors are pressurized to employ more people than is efficient. At the same time, they have difficulty to keep their qualified and competent staff, who choose for a more prestigious job if they can get it.

An important bottleneck for the contractors remains the shortage of trucks and other equipment. It is difficult to obtain bank loans, as the banks do not recognize waste collection as a business opportunity. The City Commission explores the possibility to set up a loan guarantee, to assist the contractors in this respect.

iii) The value and threat of politics

Waste in Dar es Salaam (and many other cities) is as much a political issue as it is an issue of environmental concern. Piles of undesired garbage tarnish the image of a city and thus of the people governing it. People demand a clean living environment, but waste collection is low on their list of priorities when it comes to paying the costs. Politicians in Dar es Salaam have made use of this contradiction to raise their profile. Some have criticized the contractors and made promises of free waste collection services. Others have actively supported the contractors, for example during publicity campaigns and by assisting them with transport and office space. Local political leaders are increasingly emphasizing the employment benefits too, esp. during election campaigns.

The support of local politicians is a critical factor for most contractors, and each election brings uncertainty as to who will be support them next. But this necessary support also creates opportunities for corruption and mismanagement. To address this threat a simple and transparent system should be established to assess the performance of contractors. Both municipal officers and households, through their elected environmental ward committees, should take part in this system, thus improving accountability. This would be the single most important guarantee that an equitable and efficient waste management system remains in place.

The contractors themselves, on the other hand, should get together too and improve networking. This could increase cooperation between them and improve their bargaining power, so that the partnership with the municipality is brought into balance. Currently, the Dar es Salaam contractors perceive themselves often as contract employees of the municipal officials. Initiatives to set up a Tanzania Environmental Waste Association (TEWA) got frustrated by internal power struggles, but since the recent division of Dar es Salaam City into three municipalities new representative structures are taking shape. This, too, shows that building bridges takes time and requires collective action to become sustained.

iv) Change agents: making the market work for all

The benefits of privatized waste collection in Dar es Salaam are evident: better services and more jobs. But the pitfalls remain. Some just-for-profit contractors may try to avoid picking up waste from poorer households. On the other hand, community-based organizations with a primarily social vocation may not stay in business for lack of entrepreneurial attitudes. To expand services to all waste generating households and improve the sustainability of the entire waste management system, the developing market for public services needs to be nursed. Support agents such as ILO, but more importantly local organizations with representatives of the contractors, can be instrumental to steer the process and address market failures. They certainly have a role to act against hazardous and exploitative practices.

Once the privatized collection of solid waste is sustained and scaled up to cover the larger

part of the city efficiently, the municipalities may become perceptive of other public services which the small-scale private sector can help delivering. As a matter of fact, micro enterprises and community-based organizations are very often already doing this, informally. Water distribution, street security and market management, drainage and minor road maintenance are just a few examples where this occurs. The key change that local and international agents can help bringing about is to make local Government recognize, respect and reinforce these contributions. Such an inclusion of the local employment dimension may greatly improve the effectiveness of urban planning in developing countries.

List of Main References:

1. Study on Waste Generation in Dar es Salaam, JICA, Dar es Salaam/Tokyo, 1997
2. Collecting waste: creating jobs. Employment creation through privatized waste management in Dar es Salaam, ILO/SEED Working Paper (forth-coming, 2000)
3. Start Your Waste Collection Services, a step-by-step guide of how to start a community-based waste collection service, ILO/SLP, Lusaka (forth-coming, 2000) and ILO/SEED, 2000.
4. Involving micro- and small enterprises, Guidelines for municipal managers, H. Haan, A. Coad and I. Lardinois, ILO/SKAT/WASTE, 1998.
5. Public services through private enterprise. Micro-privatization for improved delivery. M. Harper, New Delhi, 2000.